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PQL 55180 LED 2 X 4 PANEL- 50W/50K- 120-277V/DIMMABLE/V4- SUPERIOR LIFE®

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LumCAT: 55180

Report No: SENSING20100322s001

Voltage(V): 0.000

Test No:

Current(A): 0.000

LampCAT: 2835-5000K

Power (W): 49.700

Lamp flux(lm): 4725.0

PF:0.000

Number of Lamps:1

Ballast type:

Length(mm): 1200

Width(mm): 600

Phm Type:C

Height(mm): 10

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Photometric Results

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Lumens(lm): 4725.15

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 95.07

Central intensity(cd): 1625.844

Maximum intensity(cd): 1632.449

Angle of maximum intensity: C=30.0  $\gamma$ =0.0

Beam Angle(50%Imax): [V]Left=58.7 Right=55.3

[H]Left=57.4 Right=54.7

Field angle(10%Imax): [V]Left=83.1 Right=79.7

[H]Left=82.6 Right=79.3

Maximum s/h: C0\_180=0.64 C90\_270=0.64

Up flux rate of lamp(%): 0.52%

Down flux rate of lamp(%): 99.48%

Up flux rate of luminaire(%):0.52%

Down flux rate of luminaire(%):99.48%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 78.081%

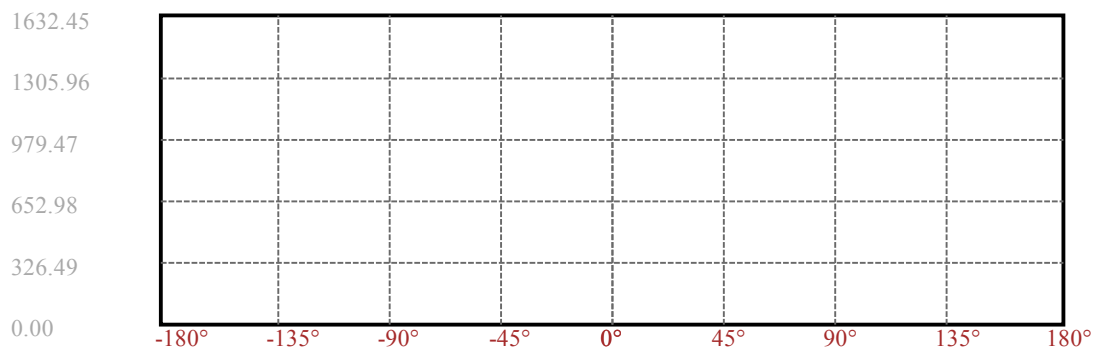
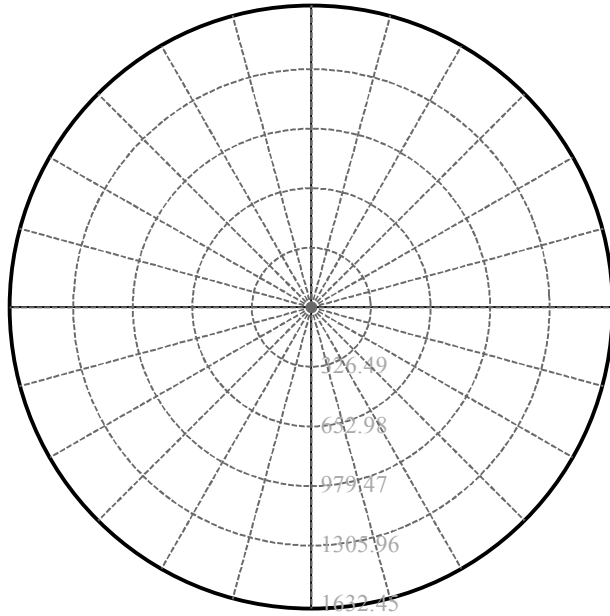
Zonal flux distribution table

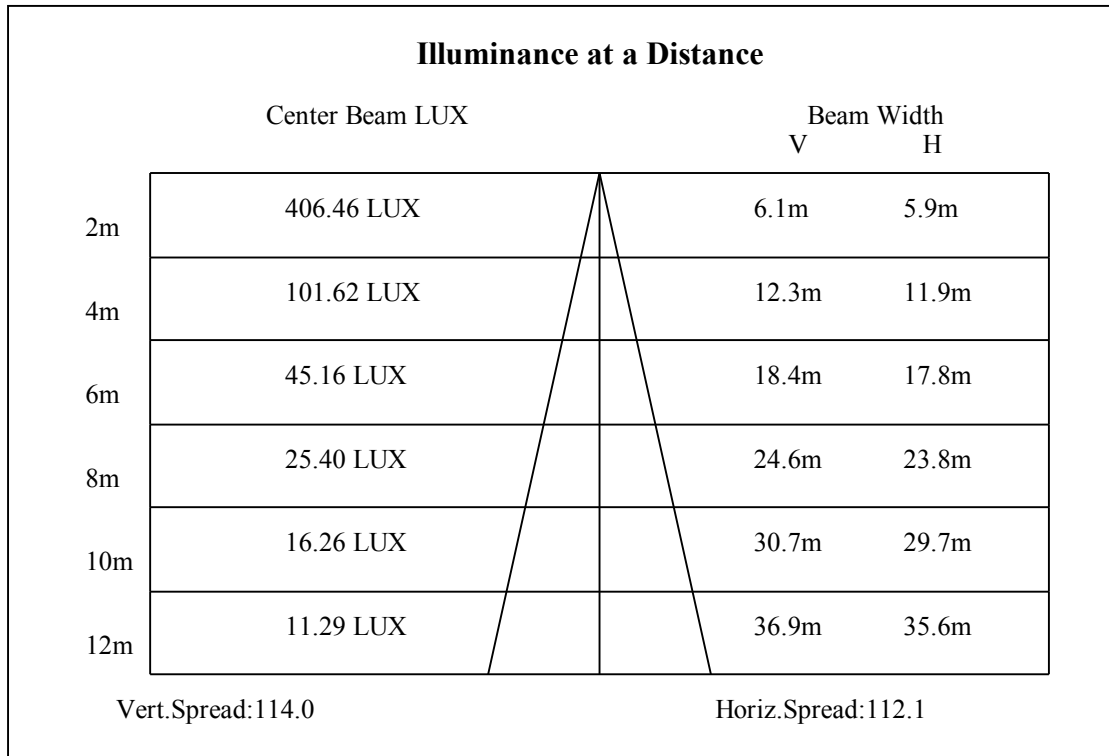
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	1628.331	.000	.000	.000%	.000%
5.0	1621.828	38.855	38.855	.822%	.822%
10.0	1601.599	115.312	154.167	2.440%	3.263%
15.0	1566.761	187.945	342.112	3.978%	7.240%
20.0	1519.481	254.350	596.461	5.383%	12.624%
25.0	1457.883	312.271	908.732	6.609%	19.232%
30.0	1383.586	359.590	1268.322	7.610%	26.843%
35.0	1297.621	394.827	1663.149	8.356%	35.199%
40.0	1202.443	417.117	2080.266	8.828%	44.027%
45.0	1094.578	425.312	2505.578	9.001%	53.028%
50.0	981.467	419.495	2925.073	8.878%	61.906%
55.0	855.758	399.474	3324.547	8.454%	70.361%
60.0	722.915	364.906	3689.452	7.723%	78.084%
65.0	588.644	318.842	4008.295	6.748%	84.832%
70.0	447.782	262.430	4270.724	5.554%	90.386%
75.0	312.873	198.823	4469.547	4.208%	94.594%
80.0	189.046	134.299	4603.846	2.842%	97.436%
85.0	80.318	73.193	4677.039	1.549%	98.985%
90.0	5.511	23.501	4700.539	.497%	99.482%
95.0	1.631	1.955	4702.495	.041%	99.524%
100.0	1.889	.956	4703.451	.020%	99.544%
105.0	2.256	1.109	4704.560	.023%	99.567%
110.0	2.630	1.277	4705.837	.027%	99.594%
115.0	3.051	1.438	4707.275	.030%	99.625%
120.0	3.520	1.597	4708.873	.034%	99.659%
125.0	3.982	1.734	4710.607	.037%	99.695%
130.0	4.424	1.828	4712.435	.039%	99.734%
135.0	4.879	1.880	4714.314	.040%	99.774%
140.0	5.266	1.878	4716.193	.040%	99.814%
145.0	5.626	1.817	4718.010	.038%	99.852%
150.0	5.980	1.709	4719.719	.036%	99.888%
155.0	6.306	1.555	4721.274	.033%	99.921%
160.0	6.517	1.345	4722.619	.028%	99.950%
165.0	6.673	1.087	4723.706	.023%	99.973%
170.0	6.754	.796	4724.502	.017%	99.989%
175.0	6.768	.484	4724.986	.010%	100.000%
180.0	6.836	.163	4725.148	.003%	100.003%

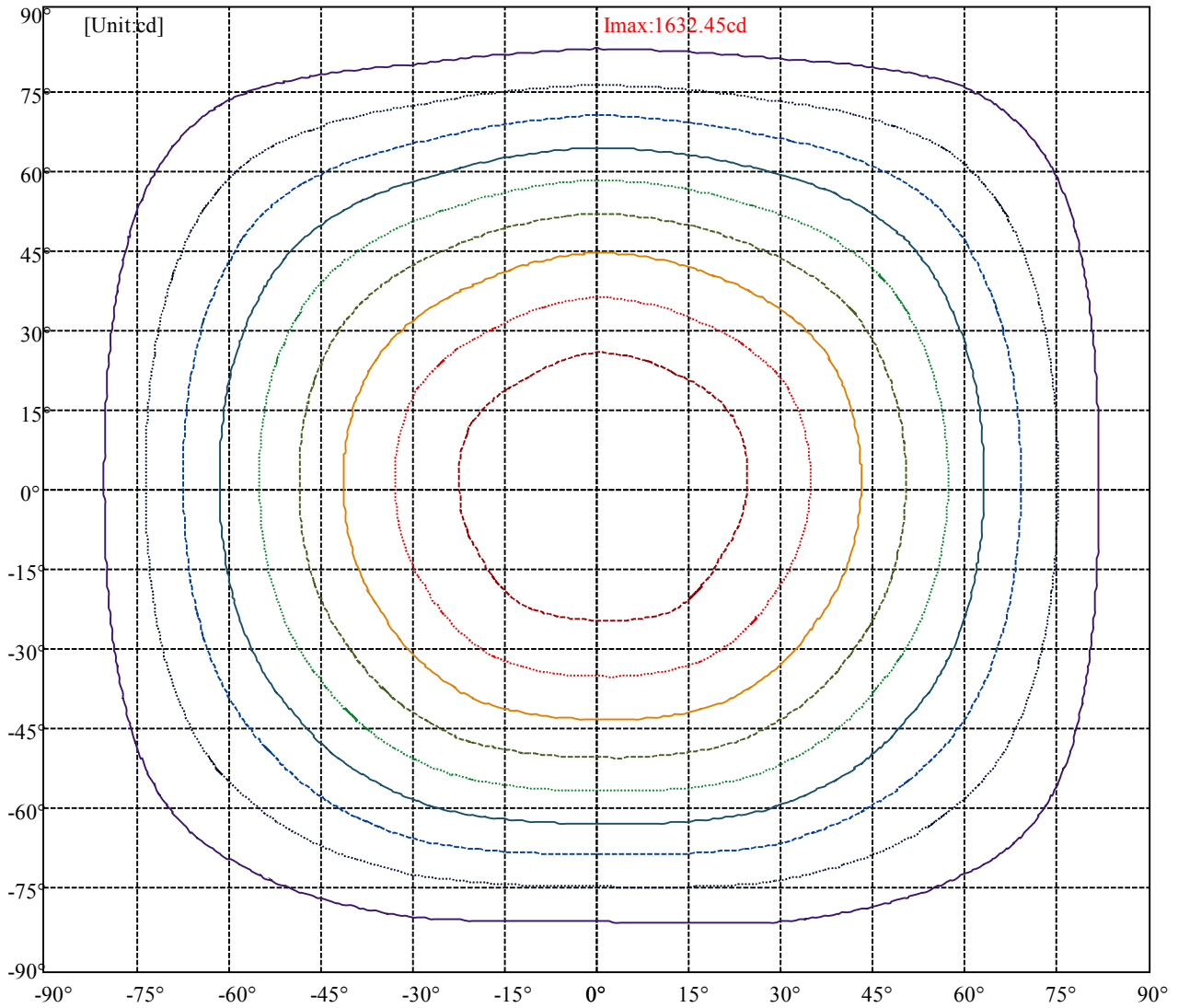
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1268.322	26.843%	26.842%
0-40	2080.266	44.027%	44.025%
0-60	3689.452	78.084%	78.081%
0-90	4700.539	99.482%	99.479%
90-120	8.334	.176%	.176%
90-130	11.895	.252%	.252%
90-150	19.180	.406%	.406%
90-180	24.447	.517%	.517%
0-180	4725.148	100.003%	100.000%

ZONAL LUMEN SUMMARY

0-10	154.167
10-20	442.295
20-30	671.861
30-40	811.943
40-50	844.807
50-60	764.380
60-70	581.272
70-80	333.122
80-90	96.693
90-100	2.912
100-110	2.386
110-120	3.036
120-130	3.562
130-140	3.758
140-150	3.526
150-160	2.900
160-170	1.883
170-180	.484





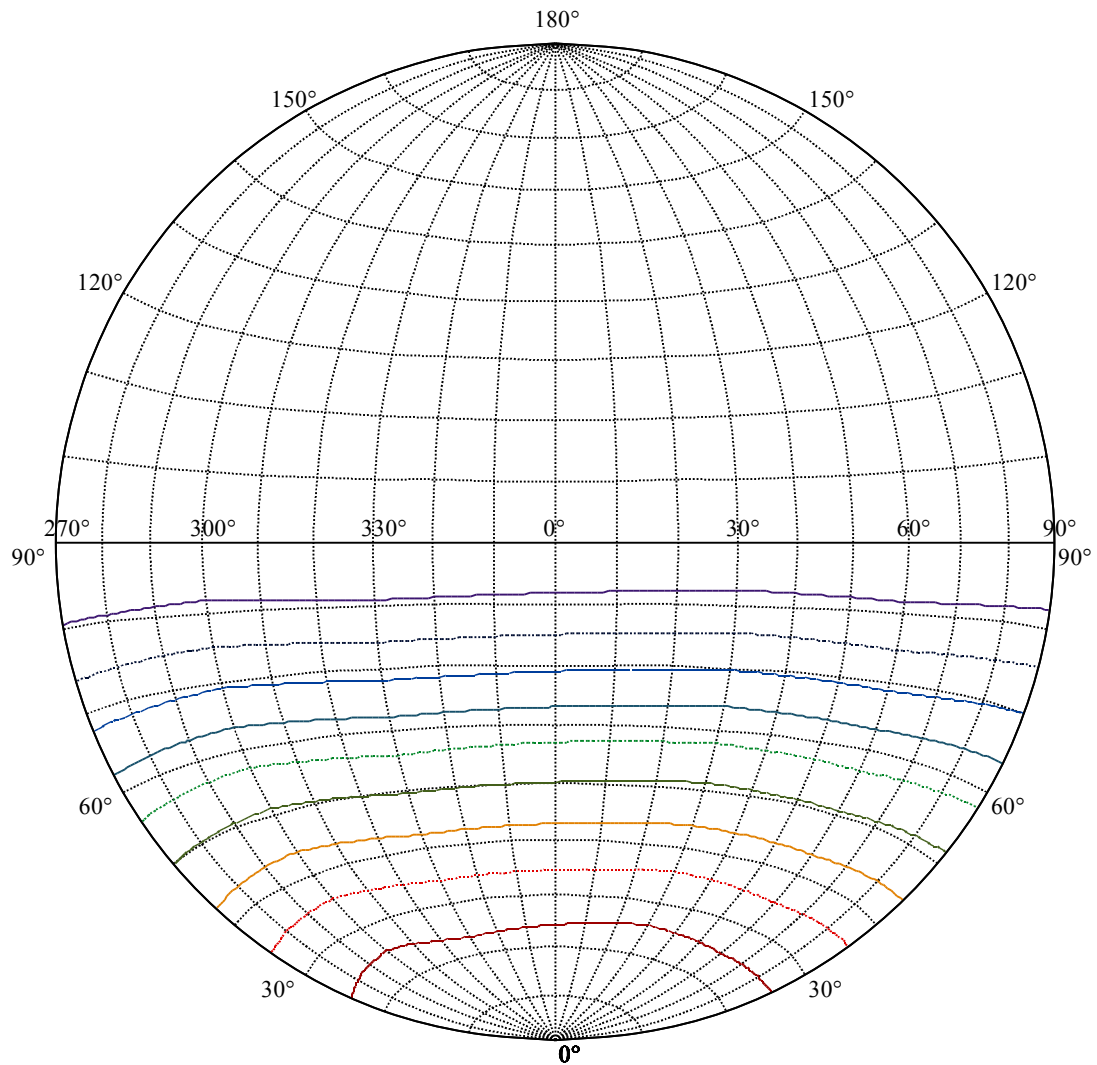


(10%Imax) 163.083	—
(20%Imax) 326.166	⋯
(30%Imax) 489.249	- - -
(40%Imax) 652.332	—
(50%Imax) 815.416	⋯
(60%Imax) 978.499	- - -
(70%Imax) 1141.58	—
(80%Imax) 1304.66	⋯
(90%Imax) 1467.75	- - -

Equipment: GMS2200  
 Temperature(°C): 25

Date:  
 Humidity(%): 60%

Operator:  
 Distance(m): 13.72

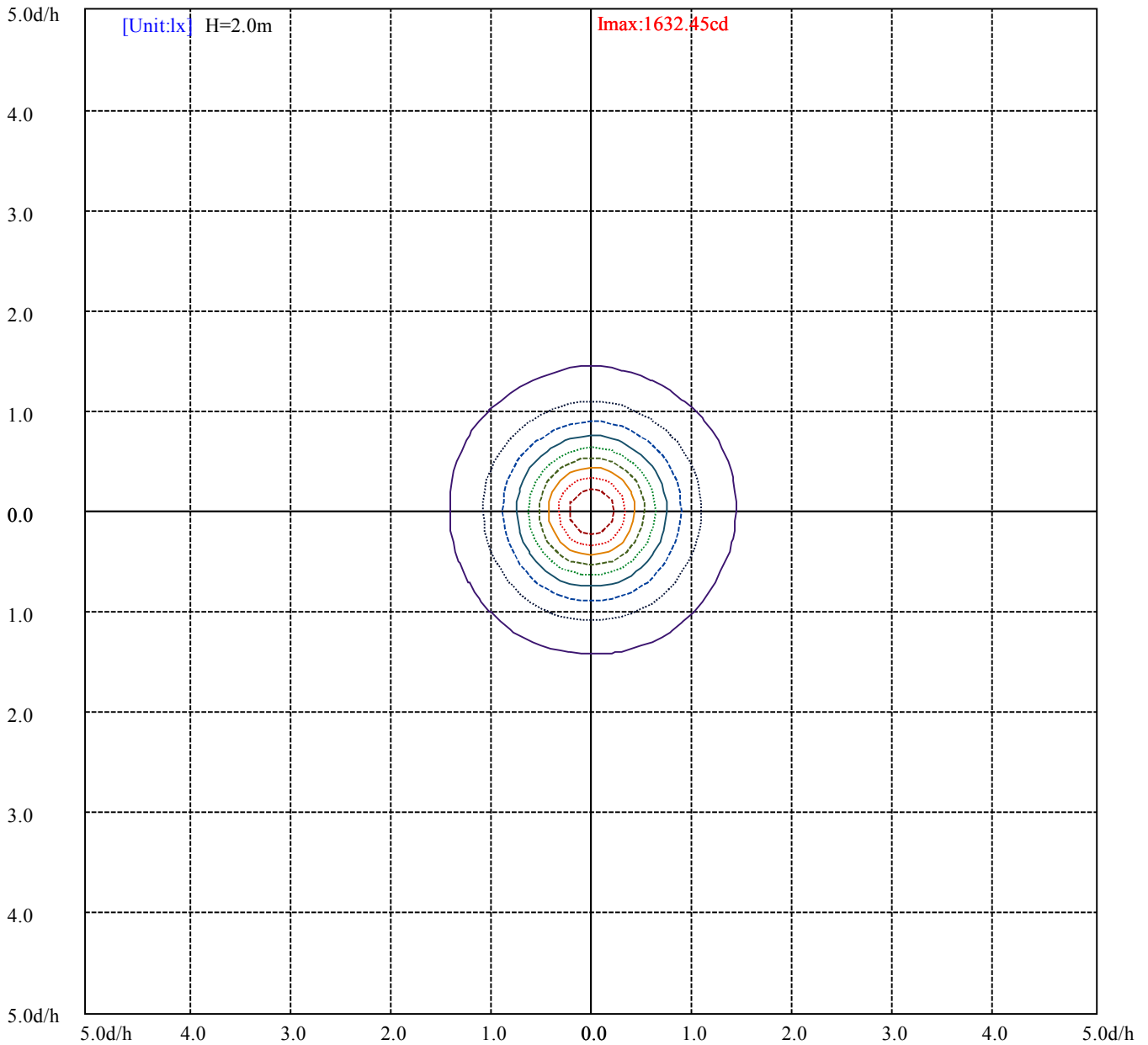


House

Road

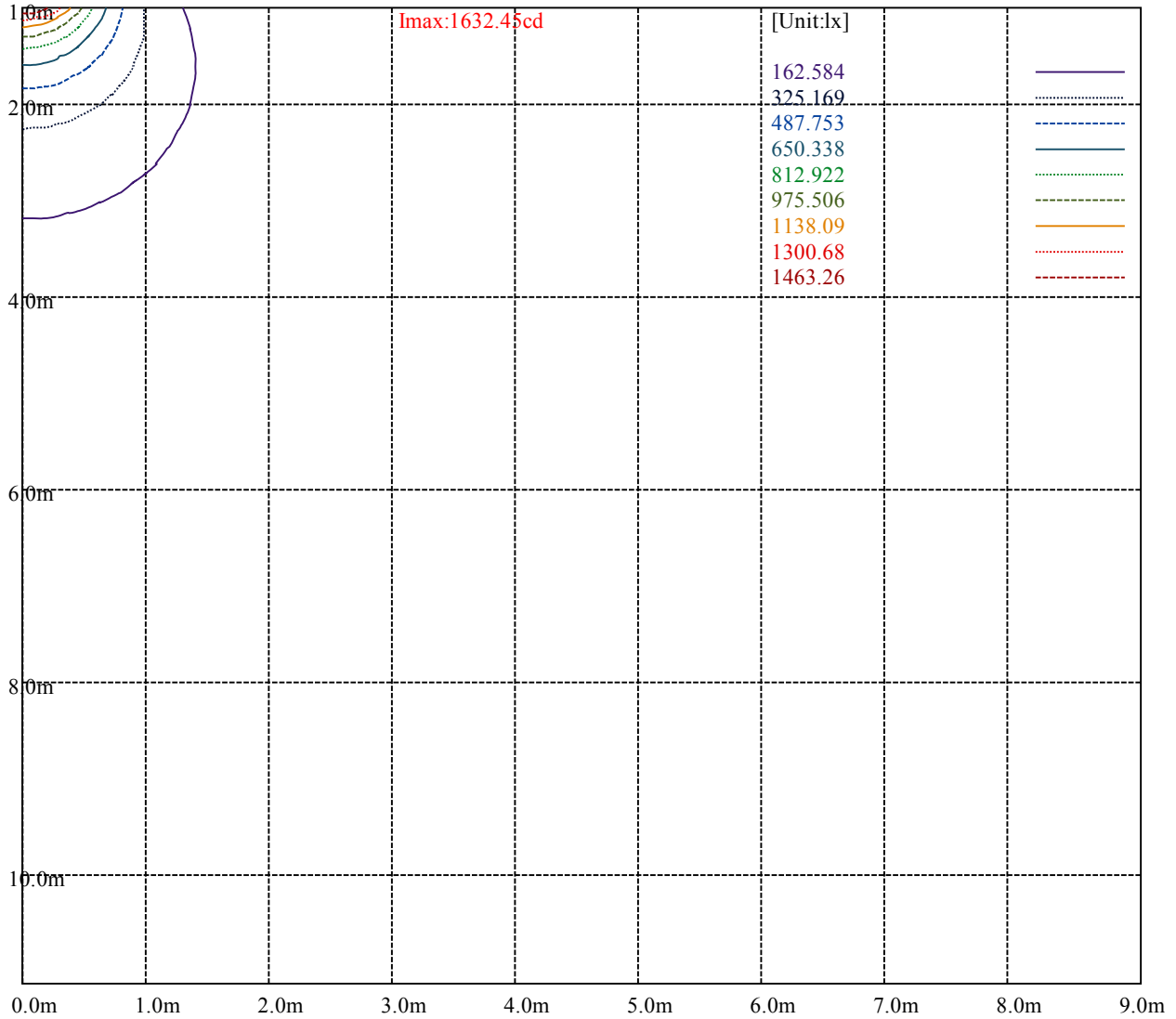
**I<sub>max</sub>:1632.45cd**

(10%I <sub>max</sub> ) 163.245	—
(20%I <sub>max</sub> ) 326.49	---
(30%I <sub>max</sub> ) 489.735	- - - -
(40%I <sub>max</sub> ) 652.98	—
(50%I <sub>max</sub> ) 816.224	---
(60%I <sub>max</sub> ) 979.469	- - - -
(70%I <sub>max</sub> ) 1142.71	—
(80%I <sub>max</sub> ) 1305.96	---
(90%I <sub>max</sub> ) 1469.2	- - - -



(10%Emax) 40.801	———
(20%Emax) 81.602	.....
(30%Emax) 122.403	- - - - -
(40%Emax) 163.204	———
(50%Emax) 204.005	.....
(60%Emax) 244.806	- - - - -
(70%Emax) 285.6075	———
(80%Emax) 326.4075	.....
(90%Emax) 367.21	- - - - -



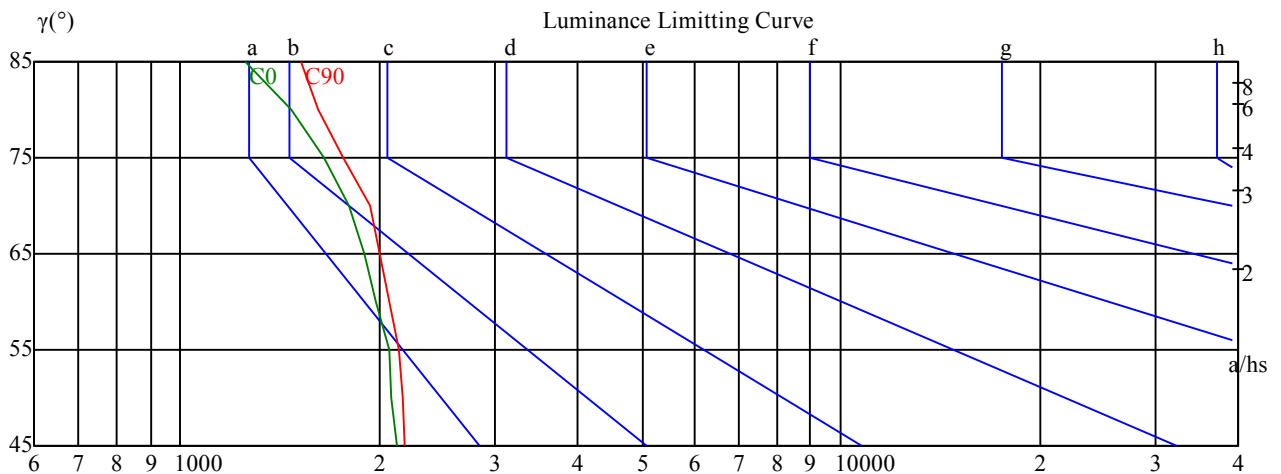


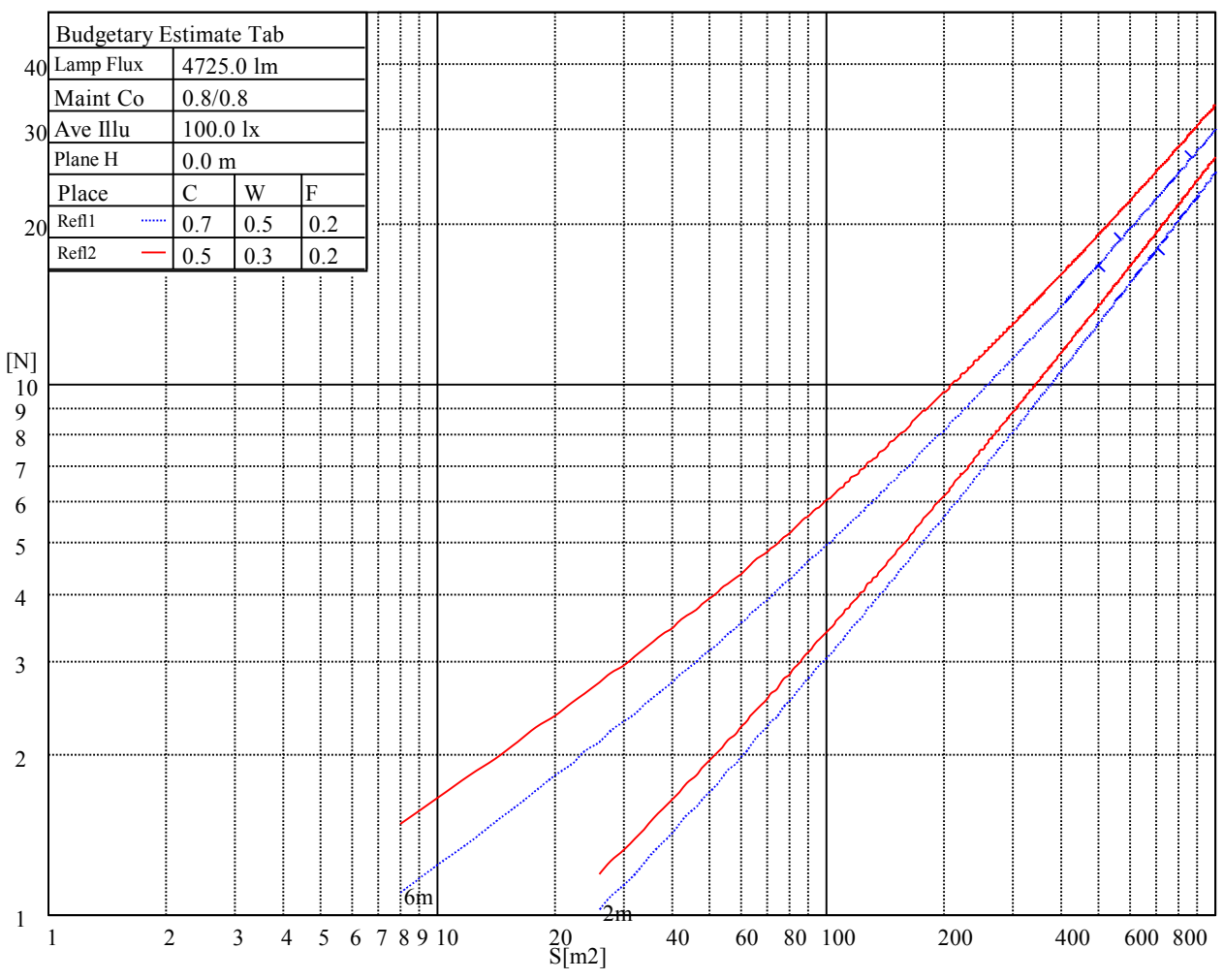
Luminance Table

$\gamma$	45	50	55	60	65	70	75	80	85
C0	2122	2086	2073	1982	1903	1795	1653	1471	1256
C45	0	0	0	0	0	0	0	0	0
C90	2190	2175	2139	2068	1998	1933	1767	1612	1525

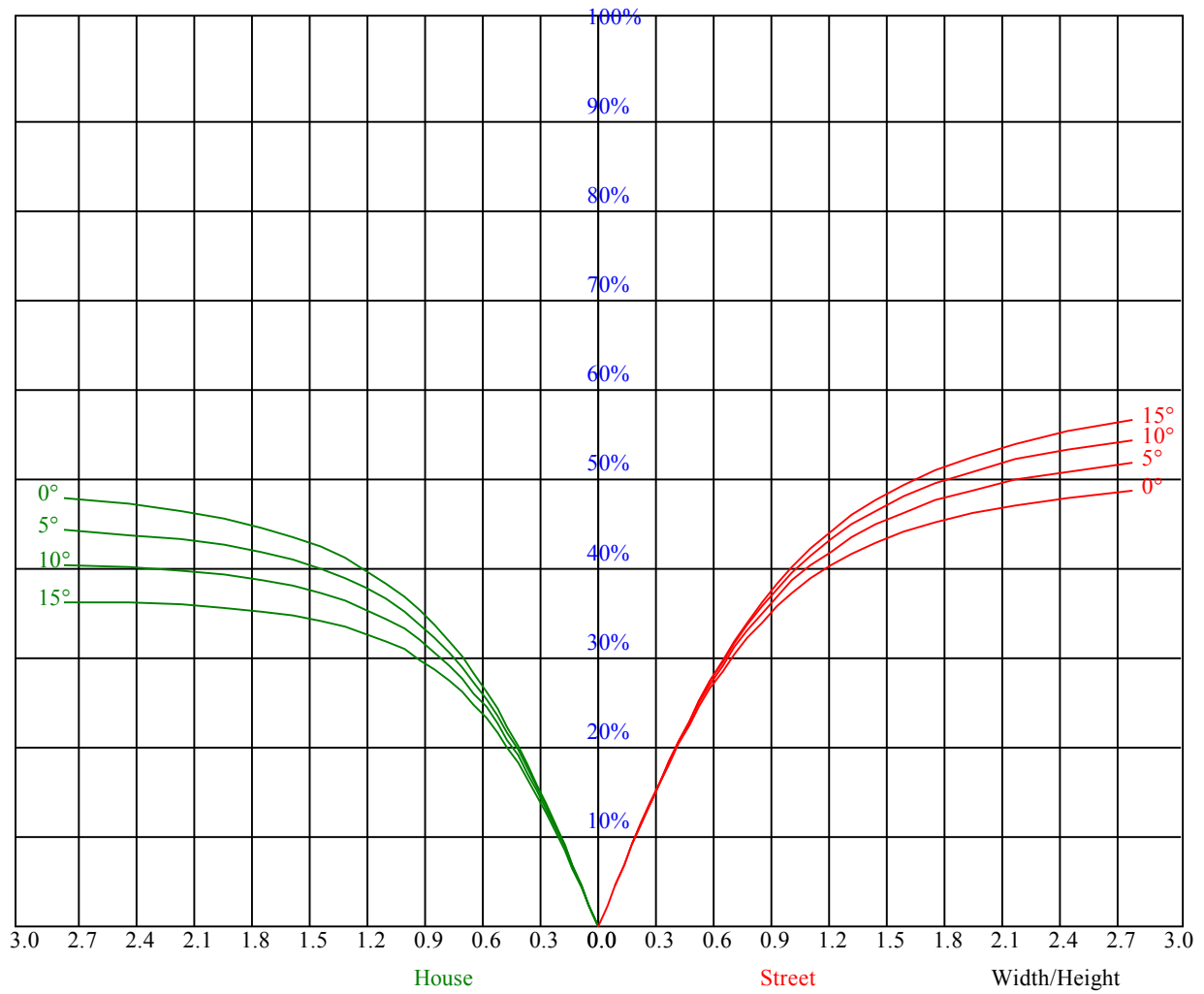
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.99
1	1.04	0.99	0.95	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.88	0.89	0.87	0.85	0.83
2	0.90	0.83	0.77	0.88	0.82	0.77	0.85	0.79	0.75	0.81	0.77	0.73	0.78	0.74	0.71	0.69
3	0.79	0.71	0.64	0.77	0.70	0.64	0.74	0.68	0.62	0.72	0.66	0.61	0.69	0.64	0.60	0.58
4	0.70	0.61	0.54	0.69	0.60	0.54	0.66	0.59	0.53	0.64	0.57	0.52	0.61	0.56	0.52	0.49
5	0.62	0.53	0.47	0.61	0.53	0.46	0.59	0.52	0.46	0.57	0.50	0.45	0.55	0.49	0.45	0.43
6	0.56	0.47	0.41	0.55	0.47	0.41	0.53	0.46	0.40	0.52	0.45	0.40	0.50	0.44	0.39	0.37
7	0.51	0.42	0.36	0.50	0.42	0.36	0.48	0.41	0.35	0.47	0.40	0.35	0.46	0.39	0.35	0.33
8	0.46	0.38	0.32	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.29
9	0.43	0.34	0.29	0.42	0.34	0.29	0.41	0.34	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.26
10	0.39	0.31	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.26	0.24



PQL 55180 LED 2 X 4 PANEL- 50W/50K- 120-277V/DIMMABLE/V4- SUPERIOR LIFE®

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1625.84	1621.69	1602.52	1568.28	1521.31	1460.56	1384.97	1299.76	1208.03
30.0	1632.45	1630.82	1613.69	1580.26	1537.86	1479.97	1404.95	1321.78	1227.19
60.0	1631.63	1622.66	1605.38	1572.52	1526.77	1467.66	1395.98	1305.63	1209.99
90.0	1626.58	1624.30	1607.17	1573.74	1533.78	1477.52	1404.95	1322.59	1235.34
120.0	1627.88	1617.69	1595.02	1562.65	1514.38	1447.68	1373.72	1288.10	1191.23
150.0	1625.60	1620.22	1600.65	1563.14	1513.40	1452.24	1373.15	1291.61	1196.21
180.0	1625.84	1615.41	1590.62	1550.99	1498.64	1431.29	1353.09	1264.13	1164.98
210.0	1632.45	1619.81	1594.45	1554.09	1500.84	1433.00	1356.84	1263.88	1163.18
240.0	1631.63	1624.30	1603.09	1569.66	1522.37	1462.03	1389.46	1303.84	1208.44
270.0	1626.58	1619.81	1600.24	1566.16	1518.94	1458.85	1385.87	1299.93	1201.75
300.0	1627.88	1625.11	1606.36	1575.37	1530.52	1475.89	1402.50	1319.33	1229.64
330.0	1625.60	1620.14	1600.00	1564.28	1514.95	1447.92	1377.55	1290.87	1193.35
360.0	1625.84	1621.69	1602.52	1568.28	1521.31	1460.56	1384.97	1299.76	1208.03
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1098.44	984.69	876.65	734.03	599.65	462.34	327.14	201.33	93.85
30.0	1122.82	1010.29	895.32	759.96	625.42	486.80	347.94	219.51	107.88
60.0	1111.57	995.86	863.52	739.66	602.51	455.32	318.99	199.37	84.56
90.0	1124.45	1016.82	893.69	755.07	618.90	486.80	339.46	211.03	104.78
120.0	1084.33	975.39	843.05	711.36	574.86	436.65	302.11	178.25	67.60
150.0	1083.68	976.05	853.73	717.56	591.17	455.00	318.50	193.66	86.68
180.0	1056.93	940.98	810.92	688.21	553.99	411.13	285.96	164.88	59.44
210.0	1053.26	942.37	809.46	677.44	534.09	403.95	271.45	151.67	48.44
240.0	1100.80	985.01	860.26	720.01	597.70	450.92	305.29	187.30	79.99
270.0	1093.46	975.47	842.48	714.38	575.43	419.77	299.17	174.66	63.52
300.0	1118.74	1003.77	879.01	747.73	609.93	469.68	331.14	203.53	93.36
330.0	1086.45	970.91	841.01	709.57	580.08	435.02	307.33	183.39	73.71
360.0	1098.44	984.69	876.65	734.03	599.65	462.34	327.14	201.33	93.85
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	12.80	1.63	1.88	2.20	2.61	3.02	3.43	3.91	4.32
30.0	15.98	1.55	1.79	2.12	2.45	2.85	3.26	3.83	4.16
60.0	3.43	1.55	1.88	2.12	2.53	2.94	3.34	3.83	4.32
90.0	9.79	1.55	1.79	2.12	2.53	2.94	3.43	3.83	4.32
120.0	1.55	1.63	1.88	2.28	2.61	3.10	3.59	4.00	4.49
150.0	7.01	1.63	1.88	2.28	2.61	3.02	3.59	4.00	4.49
180.0	1.79	1.71	1.96	2.37	2.69	3.10	3.67	4.08	4.57
210.0	1.55	1.71	2.04	2.45	2.85	3.26	3.83	4.24	4.65
240.0	1.71	1.63	1.88	2.28	2.69	3.10	3.59	4.08	4.57
270.0	1.47	1.63	1.88	2.37	2.69	3.18	3.59	4.08	4.49
300.0	5.55	1.63	1.88	2.20	2.61	3.02	3.43	3.91	4.32
330.0	3.51	1.71	1.96	2.28	2.69	3.10	3.51	4.00	4.40
360.0	12.80	1.63	1.88	2.20	2.61	3.02	3.43	3.91	4.32
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	4.81	5.22	5.55	5.87	6.20	6.44	6.52	6.61	6.69
30.0	4.65	4.97	5.38	5.71	6.12	6.36	6.52	6.69	6.69
60.0	4.73	5.14	5.46	5.87	6.20	6.44	6.69	6.77	6.85
90.0	4.73	5.22	5.55	5.95	6.28	6.61	6.69	6.77	6.85
120.0	4.97	5.30	5.71	6.12	6.44	6.61	6.77	6.85	6.85
150.0	4.97	5.30	5.71	5.95	6.28	6.44	6.69	6.77	6.69
180.0	4.97	5.38	5.63	5.95	6.28	6.44	6.61	6.69	6.69
210.0	5.14	5.55	5.87	6.20	6.44	6.61	6.69	6.77	6.77
240.0	4.97	5.38	5.79	6.20	6.44	6.69	6.85	6.85	6.85
270.0	4.97	5.38	5.79	6.12	6.52	6.69	6.85	6.85	6.77
300.0	4.81	5.14	5.55	5.87	6.28	6.44	6.61	6.77	6.85
330.0	4.81	5.22	5.55	5.95	6.20	6.44	6.61	6.69	6.69
360.0	4.81	5.22	5.55	5.87	6.20	6.44	6.52	6.61	6.69

Equipment: GMS2200  
Temperature(°C): 25

Date:  
Humidity(%): 60%

Operator:  
Distance(m): 13.72

Intensity data(cd)

C/γ(°)	180.0
0.0	6.77
30.0	6.77
60.0	6.93
90.0	6.85
120.0	6.93
150.0	6.77
180.0	6.77
210.0	6.77
240.0	6.93
270.0	6.85
300.0	6.93
330.0	6.77
360.0	6.77